Castilleja

A Publication of the Wyoming Native Plant Society

www.uwyo.edu/wyndd/wnps/wnps_home.htm

May 2002

Volume 21, No. 2

First Place Award
Desert yellowhead
(*Yermo xanthocephalus)*

By Mike Evans, Saratoga

See the three winning photos posted at the WNPS homepage:

www.uwyo.edu/wyndd/wnps/wnps_home.htm

Judges for the 2002 contest:
Jennifer Whipple and
Walter Fertig

First WNPS Photo Contest Winners

We are pleased to announce the winners of the first Wyoming Native Plant Society photo contest. The winning entry is a striking shot of Desert yellowhead (*Yermo xanthocephalus*) by Mike Evans (Saratoga, WY). He is awarded the $25 prize and 1-year free subscription to *Castilleja*. Second place recognition goes to Shelly Ellis (Jelm, WY) for her photograph of Pinesap (*Hypopitys monotropa*) in peak bloom. Third place recognition goes to John Baxter (semi-retired to Bend, OR) for his vivid close-up of Twisted-stalk (*Streptopus amplexifolius*). Thanks to all entrants!

In this issue:

Photo contest winners 1
WNPS News & Calendar of Events 2
Greasewood expelled from Chenopodiaceae. 3
Desert Yellowhead 4
Heart Mountain rendezvous 5
Wyoming rare plants – 25 years later. . . . 6
Atlas of *Castilleja* readers 7
Botanist's Bookshelf 8
Xeriscaping with natives 9
Ballot 9

WNPS NEWS

Renewal Time/Elections: A renewal notice and ballot are enclosed with this issue. Members with a 00 or 01 on their mailing label need to renew now to remain in good standing, while those with a 02 are paid through the year. Membership in WNPS is still the best deal of any Native Plant Society in the West!

Summer Field Trips

Saturday, June 15
Heart Mountain – see map and description, p. 4
@Internment Camp, 13 miles N of Cody on Alt. Hwy. 14
Time: 9:00 am
Leaders: Jennifer Whipple, Erwin Evert, Bonnie Heidel
Join WNPS annual fieldtrip – see this issue for map and details!

Saturday, June 22
Mountains above Buffalo, WY
@Buffalo Federal Savings Bank, 106 Fort Street, Buffalo
Time: 9:00 am
Leaders: Claire Leon and Jean Daly
Join an impromptu hike by Bighorn Native Plant Society.

Saturday, June 22
Laramie Peak
@ Friends Park, Medicine Bow Natl. Forest
Time: 9:30 am
Leaders: and Bonnie Heidel
Join Audubon hike that also takes visitors to see Laramie columbine. Camp over on Friday or come that morning.

Saturday, July 6
@ Burgess Junction Visitor Center
Time: 9:00 am
Leaders: Claire Leon and Jean Daly
View mountain wildflower plantings at the Center and then explore them in their native settings with the Bighorn Native Plant Society. Bring a lunch and warm clothes.

You may also be interested in the following events:
Saturday, June 22, 9:00 am-noon
Identifying Wildflowers - Laramie Range
@ Lincoln Monument Rest Area
Drew Arnold
This is a UW Enrichment Course, a half-day event. Registration and other information are available from http://outreach.uwyo.edu/enrichment/ or by calling 307-766-5641.

Saturday, June 29
Wildflowers & Edibles – Bighorn Mountains
@ Tensleep Preserve
Earl Jensen
This is a Nature Conservancy summer program at Tensleep Preserve, an all-day Saturday event. Participants are welcome to join for Friday evening supper and an overnight stay at the tent camp. Registration and other information are available from http://tncwyoming.org or by calling 1-307-366-2671.

August 2-7
Botany in the Curriculum:
Integrating Research and Teaching
University of Wisconsin, Madison
Botanical Society of America – special forum
This event is part of the BSA annual meeting and offers workshops for K-12 and undergraduate-level professionals. The schedule and registration information are posted at http://www.botany2002.org .

12-16 August
Twelfth Wildland Shrub Symposium: Seed and Soil Dynamics in Shrubland Ecosystems
University of Wyoming, Laramie
The schedule of events and information on registration and associated field trips are available from http://uwadmnweb.uwyo.edu/renewableresources/shrub_conf.htm or by calling 1-877-733-3618 ext. 2.

Wyoming Native Plant Society
PO Box 3452, Laramie, WY 82071

President: Joy Handley (Laramie)
Vice President: Nina Haas (Cheyenne)
Interim Secretary-Treasurer: Bonnie Heidel (Laramie)
Board Members: Claire Leon (Story),
Jim Ozenberger (Jackson)
Newsletter Editor: Bonnie Heidel (Laramie; email: bheidel@uwyo.edu)
WNPS Webmaster: Rebekah Smith (Laramie)
Teton Chapter: PO Box 82, Wilson, WY 83014 (Joan Lucas, Treasurer).
Bighorn Native Plant Society: PO Box 21, Big Horn, WY 82833 (Jean Daly, Treasurer)

New Member: Please welcome the following new WNPS members: Donna Ehle, Laramie, WY, Jill Handwerk, Fort Collins, CO. and Evelyn Skidmore, Laramie.

Treasurer's Report: Balance as of 6 May 2002: General Fund $938.60; Student Scholarship Fund $345.00; Total funds: $1303.60.

Contributors to this issue: John Baxter (JB), Robert Dorn (RD), Joy Handley (JM), Bonnie Heidel (BH), Hollis Marriott (HM) and Susan Winslow (SW). The next deadline for newsletter submissions is 15 October. Announcements and articles are welcome any time.

Greasewood Expelled From Chenopodiaceae

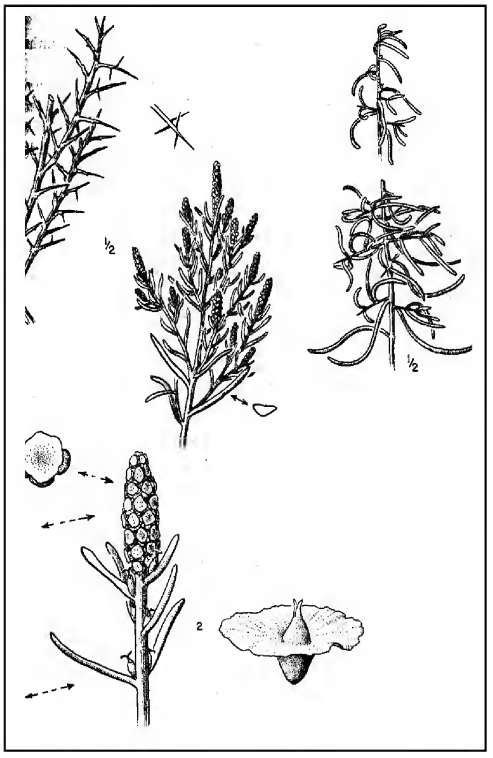
by Robert Dorn

(Editor's note: The Chenopodiaceae [Goosefoot Family] is among the revised families in the current state flora; see "Changing Times, Changing Floras," Castilleja 20(4). Greasewood is placed in its own family, the Sarcobataceae [Greasewood Family]. Dorn chronicles the discovery of Greasewood and presents the research supporting recognition of the Greasewood Family in this article. Look for more taxonomic counseling services in future issues.)

Sarcobatus vermiculatus, known as Greasewood, is a common shrub in Wyoming's basins. It has had a bizarre classification history. Meriwether Lewis first described this plant after encountering it while the Lewis and Clark Expedition traversed Montana in 1805, but he did not give it a Latin name. He first called it "fleshy leafed thorn" and later "pulpy-leafed thorn." He collected a specimen on Maria's River on their return trip in 1806. The specimen is preserved in the herbarium of the Academy of Natural Sciences of Philadelphia. This specimen had not been taken to London by Frederick Pursh so was not treated along with the other Lewis and Clark collections in Pursh's Flora Americanae Septentrionalis in 1814.

In 1819 or 1820, Edwin James collected Greasewood probably in Colorado while with the Long Expedition. John Torrey identified and described the plants from the expedition, but again greasewood slipped through the cracks. Thomas Nuttall collected it while crossing Wyoming in 1834, but his herbarium name, *Sarcacanthus campestris*, was never published. David Douglas collected it probably in Washington state in 1826 and sent it to W. J. Hooker in England. The specimen was staminate so Hooker thought it might belong in *Batis* and described it as *B. ? vermiculata* in 1838. Thus, it took over 30 years to be formally described after it was first discovered.

Maximilian, Prince of Wied, collected a specimen in Montana in 1833 and took it back to Europe. Nees von Essenbeck, who identified Maximilian's plants, recognized it as a new genus and described it as *Sarcobatus maximiliani* in 1841. Nees referenced Lewis and Clark's "Pulpy Thorn" translating it into Latinized Greek, *sarco*, fleshy, and *batos*, bramble. John Fremont, an army officer exploring the West, collected another specimen in Wyoming in 1842. John Torrey and Fremont, unaware of Nees' description, erected a new genus *Fremontia* in 1845 using Hooker's epithet of *vermiculata* but misspelled it as *vermicularis*. Torrey finally made the combination *Sarcobatus vermiculatus* in 1848, but the misspelling *vermicularis* persisted for another quarter century.



Greasewood (*Sarcobatus vermiculatus*)
From: Vascular Plants of the Pacific Northwest
Illustration by Jeanne R. Janish

Everything was fine for 150 years as Greasewood resided comfortably alongside the other species of Chenopodiceae. In 1997, H.-D. Behnke described a new family, Sarcobataceae, based on chloroplast DNA sequencing data, published by Downie, Katz-Downie, and Cho also in 1997, and on sieve element plastid differences. Rather than being similar to the other members of Chenopodiaceae, *Sarcobatus* shows closer affinity to the Phytolaccaceae and Nyctaginaceae. But morphologically, it does not resemble these families at all.

How many more such surprises can we expect?

References

Behnke, H. D. 1997. Sarcobataceae - a new family of Caryophyllales. Taxon 46:495-507.

Downie, S. R. et al. 1997. Relationships in the Caryophyllales as suggested by phylogenetic analyses of partial chloroplast **DNA ORF2280** homolog sequences. Amer. J. Bot. 84:253-273.

The Desert Yellowhead: Wyoming's Newest Threatened Plant

Desert yellowhead (*Yermo xanthocephalus;* also called "Yermo") is the first state endemic plant of Wyoming to be listed as a Threatened species under the Endangered Species Act, published on 14 March 2002 (USDI Fish & Wildlife Service 2002) and listed one month later. It was discovered in 1990 by Robert Dorn and described as a new species in a new genus by him the following year (Dorn 1991). It is only the fourth plant recognized as Threatened or Endangered in the state, joining the Ute ladies-tresses (*Spiranthes diluvialis*), Blowout penstemon (*Penstemon haydenii*), and Colorado butterfly plant (*Gaura neomexicana* ssp. *coloradensis*).

Yermo is a tap-rooted, glabrous perennial with one or more leafy stems up to 12 inches tall and lance-shaped leathery leaves that are often folded along the midvein, surmounted by clusters of yellow flowers (see p. 1). It is drought-adapted, yet some of its closest known relatives are thought to be wetland plants of the eastern United States.

It can be recognized as a member of the Senecioneae Tribe (Asteraceae) in having only disk flowers without ray flowers, a pappus of capillary bristles, flattened style branches and other characteristics. However, it differs from all other member of the Senecioneae Tribe in Wyoming in having yellow involucral bracts and differences in anthers and styles.

The species is restricted to shallow deflation hollows below sandstone outcrops of the Split Rock Formation, with high volcanic ash content. The associated species in these sparsely-vegetated settings consists mainly of cushion plants and scattered Indian ricegrass (*Achnatherum hymenoides*). Dorn discovered Yermo while surveying for a state-endemic phlox that grows in the same area. Unlike the rare phlox, Yermo is known from only one population, located in Fremont County on Bureau of Land Management. Systematic survey efforts to find new populations were not successful. The most recent census results at the one population document total numbers at 11,967 individuals (Richard Scott personal communication). The entire known habitat of the species occupies an area of 8.3 acres (Richard Scott personal communicaton).

It was petitioned for listing in 1997, and the U.S. Fish and Wildlife Service determined in March 2002 that listing was warranted because the single known population is potentially threatened by surface disturbances associated with oil and gas development, mineral extraction, recreation, and chance natural events. BH

References

Dorn, R. D. 1991. *Yermo xanthocephalus* (Asteraceae: Senecioneae): a new genus and species from Wyoming. Madrono 38 (3):198-201.

FLORAL FUNNIES: A Composite Sketch

WANTED: "Hap" Lopappus

ALIAS: Tony Stus, Sten Otis, I. Socoma, Ray Jacksonia, Eric Ameria, Mac Haeranthera, O. O. Nopsis, Os Bertia, Les Singia, and "Oreo" Chrysum FOR: Impersonating other genera, arson (as Pyrrocoma), creating a traffic Hazardia, illegal Croptilon, the sinkng of the Columbia Doria (and the Hespero Dora), and playing the Xylothamia. JH

Samphire by the Campfire

(Tune: Tiptoe through the Tulips)

By John Baxter

Samphire by the campfire
By the campfire
In the Snowy Range
There's samphire by the campfire tonight .
(Foo da racka sacky, want some seafood, Mama)

Salicornia
From California
It's sure the best yummy in the tummy,
Samphire by the campfire tonight.
(Ooo papa dah, ooo papa day, out where the antelope play)

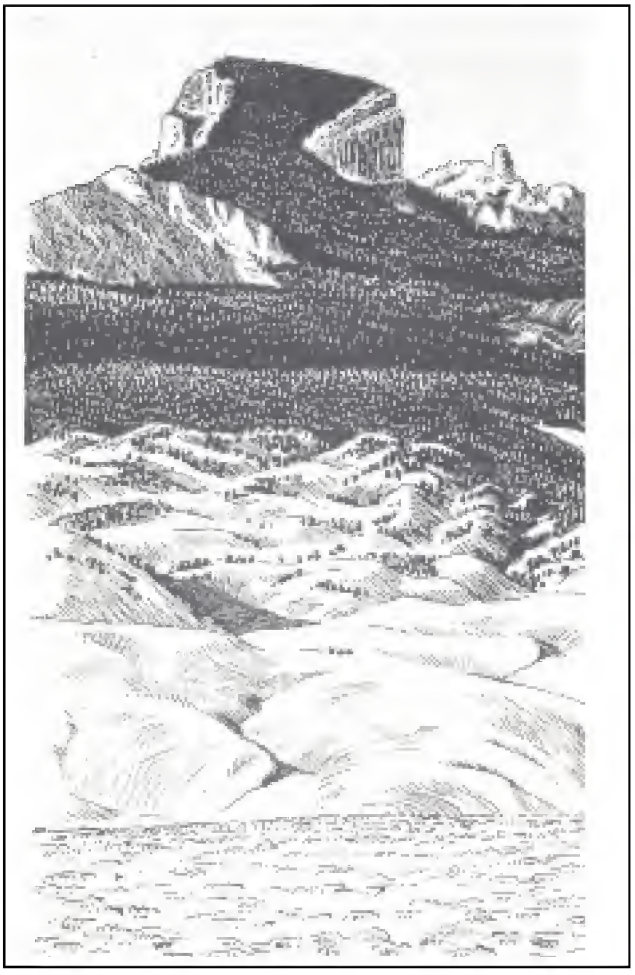
It grows in strong al-ka-li,
Beneath the wide western sky.

So won't you try it
In your diet,
Go ahead, man, and sauté or fry it
Samphire by the campfire tonight.

(Editor's Note of Warning: *Salicornia rubra*, sometimes called "samphire" or "glasswort" is NOT edible to any creature, but this tune offers a lighter note in the *Castilleja* menu of mixed-metaphors.)

Heart Mountain

Wyoming Native Plant Society annual fieldtrip
July 15, 9 am – Meet at Internment Camp Monument



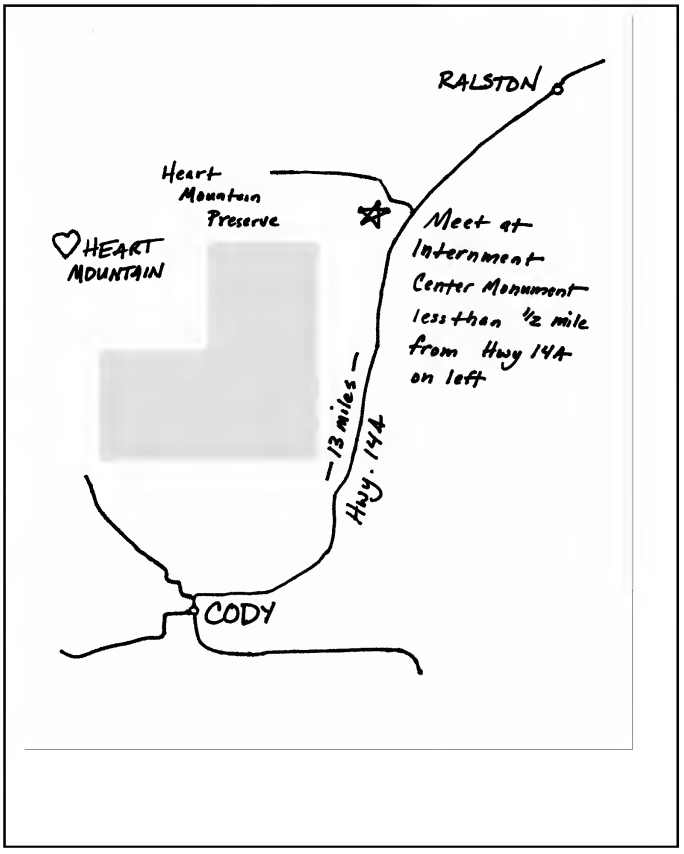


Illustration by Hannah Hinchman

Come explore Heart Mountain, 15 July, with the Wyoming Native Plant Society. Visit Wyoming's "wandering" mountain isolated from the Absarokas, with its regional endemics and Heart Mountain Preserve.

Meet at the Internment Camp Monument, about 13 miles north of Cody on Alt. Highway 14. Turn west on the gravel road marked by the Internment Camp sign and a Heart Mountain Preserve sign. Go less than ½ mile west to the parking lot at the Monument on the left [south] side of the road. From there we will drive to the trailhead and set off on a 3-mile hike, with the option of a scramble to the top. Bring good hiking boots, lunch, water, and jacket for changing weather.

Camping on the Heart Mountain Preserve is available on Saturday night (no water or facilities at the campsite). The routes to the trailhead and to the campsite are accessible by 2-wd vehicles in fair weather. In case of wet weather, easier access hikes and camping are planned, starting at the same meeting place. A Sunday morning hike to Bald Ridge will be also be offered. Hike leaders are Erwin Evert, Jennifer Whipple and Bonnie Heidel.

Wyoming Rare Plants – 25+ years later

Happy Anniversary! Wyoming's first complete rare plant list appeared 25 years ago in the form of "Rare and endangered species" at the back of "Manual or the Vascular Plants of Wyoming" (Dorn 1977). The resulting list of 297 native vascular plant species was presented in three groups of species, including state endemics, regional endemics, and other rare species (i.e., those that are not narrow endemics but known from only one county in the state and from three collections or less). This thorough work by Dorn set the standard and accelerated the pace of rare species status review.

When I tried to brand him a "pioneer", Bob Dorn demurely pointed to the first report on rare species in the state by Dwight Kimsey (1976). It is a report for the Soil Conservation Service on the 25 Wyoming species included in the nationwide list by the Smithsonian Institution (1975) and subsequently published in the Federal Register (USDI Fish & Wildlife Service 1975), provisionally proposed as Endangered or Threatened. The 1976 report has taxonomic descriptions and Rocky Mountain Herbarium distribution data. Those 1975 national lists were based on data analysis and consultation with Dorn and other botany experts across the state and country.

Intervening years have seen the discovery of new species (see "Yermo article", this issue) and many new additions to the state flora. Just before the 2002 list update was completed, the latest-breaking addition came from Hollis Marriott confirming her discovery of *Anemone lyallii* in Teton County. The 2002 Wyoming Plant Species of Special Concern List identifies 481 vascular plants of Wyoming that are vulnerable to extirpation at the state or rangewide scale due to inherent rarity or habitat loss (Fertig and Heidel 2002). Many species added to the state rare plant list since 1977 were not known in the state flora at that time, so the temporary trend in list size reflects new information rather than new endangerment.

Whatever became of the 297 species on the 1997 list? Over half of them (159) are still recognized as state species of special concern, while many (127) were shown to be more common than previously known, or moved to a list of species of "potential concern" (11 species; formerly, "watch").

In 1979, the Wyoming Natural Heritage Program (later called the Natural Diversity Database) assumed the clearinghouse roles of maintaining, building and disseminating information on rare species in the state. The first list (Dorn 1977) continued to develop and change thanks to Robert Dorn, Robert Lichvar, Hollis Marriott, Walter Fertig and co-workers who conducted systematic surveys and herbarium work, and to the prodigious floristic surveys conducted through Ronald Hartman's laboratory at the Rocky Mountain Herbarium (University of Wyoming). This progress was not possible without the interest and work of natural resource professionals, who directly contributed rare species information as well as support to floristic survey and rare species survey projects. Wyoming is doubly-fortunate for its diverse flora and the fast-paced work of documenting its rare members, resulting in a robust rare species information-base.

The current Wyoming Plant Species of Special Concern List is the latest iteration, building on all previous lists and the cumulative work of Wyoming botanists. The "new" list features:

- current information and distribution data from recent survey and taxonomic research
- current federal agency status, including the new BLM sensitive species list
- revised taxonomic treatments used in Dorn (2001), cross-referenced to synonyms

It provides a non-regulatory information resource. It includes and cross-references all species that have federal status, including those recognized by the U.S. Fish and Wildlife Service, U.S. Forest Service, and Bureau of Land Management.

In addition, the 2002 list provides a status summary for each species as indicated by information on its range context, numbers of occurrences, abundance, trends, distribution, and inherent vulnerability. This is one of many lasting legacies of Walter Fertig, who developed the system with WYNDD zoologists and compiled information to score the plant species. Species' status and field guide narrative are provided in "state species abstracts" posted at the WYNDD homepage.

Deletions and additions to the draft 2002 list were highlighted at the rare plants workshop session of the 2002 Wyoming Plant Conservation Conference held in Laramie in March. It is posted electronically at: http://www.uwyo.edu/wyndd/. Printed copies are available from: Wyoming Natural Diversity Database (WYNDD), University of Wyoming, P.O. Box 3381, Laramie, WY 82071. It is issued with the invitation for comments and data at any time. BH

References

Dorn, R.D. 1977. Manual of the Vascular Plants of Wyoming, volumes I and II. Garland Publishing Company, NY.

Dorn, R.D. 2001. Vascular Plants of Wyoming, third edition. Mountain West Publishing, Cheyenne, WY.

Fertig, W. and B. Heidel. 2002. Wyoming plant species of special concern. Unpublished list maintained by the Wyoming Natural Diversity Database, University of Wyoming, Laramie.

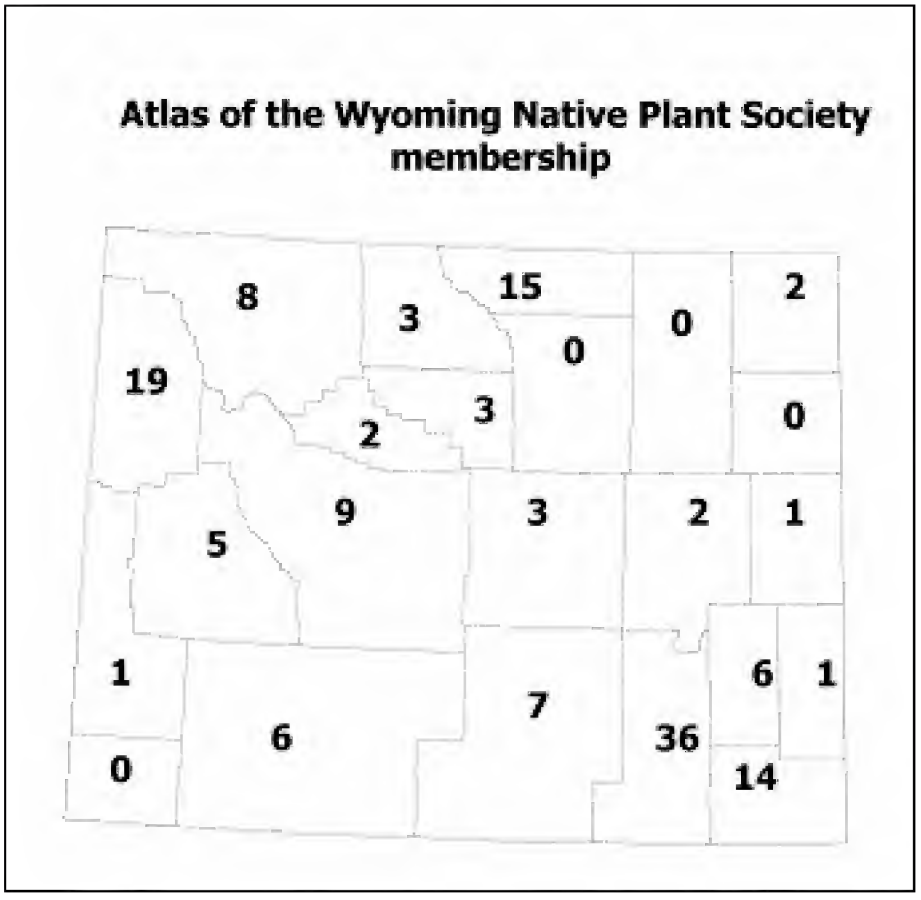
Kimsey, D. W. 1976. Endangered or Threatened flora in Wyoming. Unpublished report to the Soil Conservation Service (USDA NRCS).

Smithsonian Institution. 1975. Report on Endangered and Threatened plant species of the United State. House Document No. 94-51, Serial No. 94-A. Washington, D.C.: Government Printing Office.

USDI Fish & Wildlife Service. 1975. Endangered and Threatened plant taxa petitioned for listing as Endangered or Threatened species. Federal Register 40:27823.

Atlas of *Castilleja* readers

Wyoming Native Plant Society has a scoop on the U.S. Census Bureau with the latest membership figures to go with the annual call for renewal. All but **four** counties of Wyoming (Figure 1) are represented on the WNPS roster. When you finish reading this newsletter, please renew …and *then* circulate it among friends and colleagues in and around Buffalo, Gillette, Evanston, and Newcastle.



There are 144 Wyoming members in Wyoming Native Plant Society and an avid out-of-state following. The communities with more than 10 members include:

- Cheyenne
- Jackson
- Laramie
- Sheridan

A survey on the merit of forming chapters is included with the membership renewal and ballot.

…If you are interested in extra newsletter copies to circulate, drop a line to the WNPS address or email bheidel@uwyo.edu.

Interested in native plant societies of the region?

Castilleja will post many of the events that take place near Wyoming borders. We are looking for a place in Laramie to make the western state newsletters of the past year available for reading. If you are interested in receiving other native plant society newsletters directly, here is a list of native plant societies from surrounding states:

Colorado Native Plant Society ($15)
P.O.Box 200,
Fort Collins, CO 80522-0200

Montana Native Plant Society ($12)
P.O. Box 8783
Missoula, MT 59807-8783

Utah Native Plant Society ($12)
P.O. Box 520041
Salt Lake City, UT 84152-0041

Idaho Native Plant Society ($10)
P.O. Box 9451
Boise, ID 83707

South Dakota - Great Plains Native Plant Society ($15)
P.O. Box 461,
Hot Springs, SD
57747

Other native plant societies around the U.S. and Canada are listed by: The New England Native Plant Society (http://www.newfs.org/links.htm), North American Native Plant Society (http://www.nanps.org/) and a North American wildflower magazine (http://www.wildflowermag.com/).

Botanist's Bookshelf

A Gardener's Book of Plant Names

A Handbook of the Meaning and Origins of Plant Names. By A. W. Smith. 1963. New York: Harper & Row, Publishers.
[now available through Dover Books]

A Gardener's Book of Plant Names was passed on to me by a friend who found it at a garage sale. What a great present! Although the title may suggest otherwise, this is a resource for any plant lover, not just gardeners. The plant names included in this book are botanical or scientific names ... those scary and seemingly meaningless Latin entities tossed around with apparent ease by academics. In his Introduction, Smith quickly gets to the point regarding the advantages of using scientific plant names, and the confusion associated with common names. A single species may have three different common names in three different parts of the continent. A single common name may apply to different species or even to species of different families in different regions. Et cetera. We all know the arguments, and yet it remains close to impossible to convince non-believers that there is any utility to learning botanical Latin. This book probably is no more successful than any other in that regard, but for those of us that have chosen the Right Path, it is useful indeed. For if we understand the meanings and derivations of Latin names, they become easier to remember! And as Smith himself says, this is "... certainly welcome to those who are conscious of increasingly short memory."

The book starts with an interesting Introduction, in which Smith discusses the history of plant names, including the Linnaean revolution. He describes the process and rules for naming plants, including proper construction of specific epithets (the second word in a scientific name): "Conforming to the fiction that botanical names are Latin, the rules of Latin grammar are observed." Smith also provides some guidelines for pronunciation, as well as encouragement for the timid: "Within reasonable limits, nobody need be too disturbed about pronunciation... It is not as if botanical names were in classical Latin with an accepted pronunciation. While certain pronunciations may be preferred by usage, much must remain as a matter of personal taste and of what sounds right."

The Introduction is followed by a brief section titled Some Botanical Definitions -six pages of technical terms such as achene, involucre, pedicel, secund and tree (but not turion). Even in this dry material savory bits can be found, for example under ADVENTIVE: "Some wildflower books tend to banish all adventives from the select company of the strictly native, often to the confusion of identification. However, it is not wise to be too national about wildflowers."

The main body of the book consists of 248 pages of Meanings and Origins of Plant Names - the interesting and sometimes surprising information associated with those scary Latin words. Whether you browse or search, you will be rewarded. I began by scanning randomly chosen pages, then switched to looking up my favorites, for this book is as useful to native plant enthusiasts as it is to gardeners. I learned that *Sedum* (stonecrop, a small succulent) is named for the habit some species have of sitting on rock ledges (L. sedo, to sit). Sure enough my newly discovered Black Hills Sedum was found sitting on a damp ledge on a north-facing granite wall. On the same page, I discovered that *Senecio* (groundsel, a yellow composite) is derived from the Latin senex, old man, referring to the hoary pappus (seed hairs). Nearby, under *Salix* (willows), the reader is treated to three paragraphs describing medicinal uses of willow bark and religious uses of pussy willows. *Saxifraga* (saxifrage) is a combination of saxo, a rock, and frango, to break, referring to this plant's affinity for cracks in rock, and "... by deduction, it was accorded a medicinal quality of breaking up stone in the bladder."

Ancient Greece is well represented among plant names. I learned that Iris was the Greek goddess of the rainbow, and *Artemisia* (sagebrush) was the goddess of chastity. *Oenothera* (evening primrose) is a Greek name derived from oinos, wine, and thera, booty. "The root when eaten was supposed to increase one's capacity for wine."

Adiantum (maidenhair fern) yielded a neat discovery. Adiantos means dry (Gr.), and this fern is so-named "... because the leaflets shed water in a remarkable way - if plunged into water, the fronds remain dry." With this book, trivia buffs will find plenty of material for impressing their friends. For example, *Collinsia* (blue-eyed Mary, a small spring annual) is named for Zaccheus Collins (1764-1831), Vice President of the Philadelphia Academy of Natural Sciences. Finally, what do clubmoss and water-hoarhound have in common? Both *Lycopodium* and *Lycopus* are derived from Gr. lykos, wolf, and pous, a foot. And both plants do NOT resemble a wolf's foot. Hmmmm.

Throughout his career as an officer in the British Army, A. William Smith pursued his passion for plants and gardening wherever duty happened to send him, including south Russia, upper Burma, Australia and Africa. When he retired after World War II, he settled in New England, became a US citizen, and devoted himself to his fruit, vegetable and flower gardens, as well as collections of native wildflowers, shrubs and trees. This book was completed just before his death. Because it was published in 1963, I was assuming that it was out-of-print, but that is not the case. It was printed in revised form in 1972 and 1992. However, the original edition is now available again, through Dover Books (paperback, 432 pp., $9.95). As the following review suggests (from amazon.com), it may still be the preferred edition:

"This is a reprint of A.W. Smith's classic, which since then has been revised by William T. Stearn as A Gardener's Dictionary of Plant Names (1972) and Stearn's Dictionary of Plant Names for Gardeners (1992). Comparing it with the latter it is obvious at once that there is a great similarity, with many entries identical. The major differences are that the latter has a more modern layout, is updated and contains more information. This reprint of the original has as bonus points that it is cheaper and includes directions for pronounciation. In some cases it also contains bits of information which were edited out of its modern descendant."

And one more endorsement:

"I needed a book to use to give me the derivation of the scientific names for plants found in the wild throughout California. I looked at fifteen books at the University of California Davis Library and checked out five. I found this book to be the most useful of the bunch. It had the name of almost every plant I looked up, whereas most of the others had far fewer. I recommend this book if you want to know the derivation of plant names, whether in the garden or in the wild."

...So for only $9.95, you too can be speaking botanical Latin with ease. You too can impress your friends, scare your enemies, and get to know our green friends a little better in the process. HM

Xeriscaping with Natives

Residential landscapes in Wyoming and Montana may never be the same! At least that's the goal of the new booklet *Creating Native Landscapes in the Northern Great Plains and Rocky Mountains*. The principles of Xeriscape™ are offered as the alternative way to conventional landscape practices to conserve water and energy while decreasing fertilizer and pesticide use.

The free 15-page booklet contains illustrations, tips, and do's-and-don'ts for selecting appropriate grasses, wildflowers, trees, and shrubs. The practical issues concerning water conservation and irrigation, landscape maintenance, and plant protection are reviewed. This publication is made possible through the combined efforts of the USDA Natural Resource Conservation Service, Bridger Plant Materials Center and the Montana Association of Conservation Districts. Copies are limited, and can be obtained from the NRCS State Office in Bozeman, Montana (406-587-6842) or on the Internet via http://www/mt/nrcs.usda.gov. SW

(Reprinted from Montana Native Plant Society Newsletter)

ALSO, for an overview of landscape water conservation, with or without native plants, see the Cheyenne Botanic Garden water-conserving information posted at: http://www.botanic.org/lowwater.html.

WNPS ELECTION BALLOT

Deadline for Elections: Postmarked June 15 or bring to annual meeting

Please cast your vote for one candidate per position. All positions are are 1-year positions, except for Board member positions. Return ballots to: WNPS, P.O. Box 3452, Laramie, WY 82071.

POSITION				
PRESIDENT	_____	Jennifer Whipple, Mammoth	_____	Kent Houston, Cody
VICE-PRESIDENT	_____	Jean Daly, Big Horn	_____	Melanie Arnett, Laramie
BOARD MEMBER	_____	Evelyn Skidmore, Laramie	_____	Jim Glennon, Rock Springs
SEC-TREASURER	_____	Drew Arnold, Laramie	_____	Jan Hart, Laramie

Survey

Do you support establishment of chapters to offer local programs and hikes?

_____

_____

If you live near a community with at least 10 members, are you interested in forming a Chapter?_____

Teachers: Take Note

Plant collection guidelines for teachers are offered in order to encourage botany education using native plants while minimizing impacts to wildflower populations. The guidelines and collecting tips are posted by Montana Native Plant Society at: http://www.umt.edu/mnps/collecting_guidelines.htm.

This is the annual renewal reminder

Please renew membership in the Wyoming Native Plant Society if you have not paid dues for 2002, and be sure to keep us posted if you have a new address.

Election ballots are due by June 15 (p. 9)

Thanks!

Wyoming Native Plant Society
PO Box 3452
Laramie, WY 82071

The Wyoming Native Plant Society, established in 1981, is a non-profit organization dedicated to encouraging the appreciation and conservation of the native flora and plant communities of Wyoming. The Society promotes education and research on native plants of the state through its newsletter, field trips, and annual student scholarship award. Membership is open to individuals, families, or organizations with an interest in Wyoming's flora. Members receive *Castilleja*, the Society's quarterly newsletter, and may take part in all of the Society's programs and projects, including the annual meeting/field trip held each summer. Dues are $7.50 annually.

To join or renew, return this form to:

Wyoming Native Plant Society
PO Box 3452
Laramie, WY 82071

Name: _____

Address: _____

_____

___ $7.50 Regular Membership
___ $15.00 Scholarship Supporting Member
($7.50 goes to the annual scholarship fund)